COMTROL®

RocketLinx™ ES7510

Part Number: 32035-7

PoE SWITCH

KEY FEATURES AND BENEFITS ::

- Eight 10/100BASE-TX PoE Plus ports and two 1000BASE-TX Gigabit uplink ports
- PoE ports supporting both 15.4W IEEE 802.3af and 30W high power IEEE 802.3at standards
- Total PoE Power Budget of 220W with maximum 30W per port
- Advanced redundant ring support with 5ms recovery time, for up to 4 x 100M Rings plus one Gigabit Ring
- SNMP and IEEE 802.1AB LLDP for network management
- Tag-VLAN supporting multiple VLAN traffic isolation
- LACP port trunking for bandwidth aggregation to support video surveillance
- Redundant DC power inputs and alarm relay output
- AC 1.5KV Hi-Pot isolation protection for ports and power
- Wide operating temperature -40° to 70°C
- IPV6 support

PRODUCT DESCRIPTION ::

PoE Plus Supporting High Power Devices

The Comtrol RocketLinx ES7510 managed industrial PoE Plus switch is designed to meet the high power and advanced management needs of critical PoE applications such as real-time IP video surveillance and wireless communication utilizing Wimax and 802.11 a/b/g/n access points. Featuring a rugged design for harsh environments, intuitive web, CLI, SNMP management options, power scheduling and eight fully compliant IEEE 802.3at PoE injector ports, the ES7510 is easily configured to deliver up to 30W for even the most power intensive devices such as IP cameras utilizing heaters and pan/tilt/zoom controls.

Innovative Power Control

In addition to functioning as a PoE power source, the ES7510 includes features to enhance control of devices, ensuring that power consumption does not exceed parameters desgined by the user. This includes power budget control functions to limit power output on devices not reporting correct consumption rates, and device priority options to guarantee power to critical devices while avoiding power budget overloads.

Management and Security

The RocketLinx ES7510 is equipped with full Layer 2+ management capabilities to provide the most flexible network configuration and control. Features like Link Aggregation Control Protocol allow grouping of multiple ports to enhance bandwidth and provide load balancing while Port-Based VLAN, QoS, IGMP Snooping, and Rate Control features enable optimum control over the network environment. In addition to the full array of management capabilities, the ES7510 also supports the most advanced security features to protect the netowrk and guarantee secure, reliable data transmission. Fault relay and email notification of event alarms, DHCP supporting IP and MAC binding, IEEE 802.1X Access Control, SSH, and many other controls are included to make secure administration and management a simple task.

PoE POWER OVER ETHERNET

ROCKETLINX SPECIFICATIONS ::

HARDWARE

Interface Specification 10/100/1000BASE-TX
Enclosure
IP30 Grade Aluminum Metal Case
Installation Method DIN rail or Panel Mount
LED Indicators
Power, System Status, Ring Status, Alarm, Ethernet port Link/Activity, PoE Status, Gigabit port Link/Activity
Dimensions 7.3" x 2.6" x 6.25"
18.54 x 6.6 x 15.88 cm
Product Weight 2.75 lbs
1.25 kg

TECHNOLOGY

Standards

IEEE 802.af	PoE
IEEE 802.at	LLDP PoE Plus
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-TX
IEEE 802.1Q	VLAN
IEEE 802.1p	Class of Service
IEEE 802.1D-2004	RSTP
IEEE 802.3ad	LACP
IEEE 802.3x	Flow Control and Back Pressure
IEEE 802.1x	Port Based Network Access Control
IEEE 802.1ab	LLDP

Protocols
IGMP Snooping v1/v2/v3, IGMP query, SNMP v1/v2c/v3, SNMP MIB, NetVision utility, IP security, NTP, HTTP, HTTPS, GVRP, DHCP server/client, DHCP option 82, LACP, CoS, RSTP, RMON, LLDP, LACP, syslog
Flow Control
IEEE802.3x Flow Control and Back-Pressure

PERFORMANCE

Switch Technology
32 Gbps switch fabric
Store and forward switch technology
PoE Technology
Endspan wiring architecture
System Throughput
10Mbps 14,880
100Mbps 148,880
Gigabit Ethernet 1,488,100
Number of MAC Address 8K
Packet Buffer Memory 1Mbits
Transfer performance
64 to 1522Bytes (includes VLAN Tag)
Priority Queues per Port 4
Port Trunk (Max) 4 trunk groups
Ports per Trunk (Max) 6 ports
VLAN Groups (Max) 256

PoE FEATURES

PoE Modes
IEEE 802.3af; IEEE 802.3at; forced
PSE Type
IEEE 802.3at Type 2; Alternative A
Number of PoE Injector Ports 8
Maximum Power/ PoE Port (Max.)
15.4W (IEEE 802.3af); 30W (IEEE 802.3at)
Total Power Budget (Max.) 220W
Standard PoE Voltage Output Yes
IEEE 802.3af compliant – 44-57VDC
IEEE 802.3at compliant – 50-57VDC
PoE Control
User-configuration for PoE enable, disable, or schedule-based PoE function
Power Budget Control
User-configurable power budget limit
Smart PoE Powered Device Alive-Check
Real-time status monitor of PoE PD. Option to reset PoE PD
Real-time PoE Status on Web Interface Yes
Power Limit Control Yes
PoE Schedule Control
PoE ports are configurable as on/off by hourly/weekly basis

MANAGEMENT FEATURES

Configuration and Monitoring Interfaces
Web (http and https), SSH, Telnet, SNMP, and console port . Command Line Interface similar to Cisco. NetVision for Windows for RocketLinx discovery, easy IP configuration, and uploading firmware
Telnet and Serial Console
Cisco-like CLI; SSH support for Telnet
Maximum CLI Sessions 4
Port Configuration
Port link speed/mode, status, enable/disable
Port Mirroring
Online traffic monitoring on multiple selected ports
Port Trunk
Static Trunk and IEEE 802.3ad LACP
Up to 4 trap stations, 6 ports per trunk
SNMP
SNMP v1/v2c/v3 Traps
Up to 4 trap stations
Manual configuration of the trap server IP address
SNMP MIB
MIB-II, Bridge MIB, Ethernet-Like MIB, VLAN MIB, IGMP MIB, Private MIB
IGMP Snooping
IGMP Snooping v1/v2c/v3 for multi-cast filtering and IGMP query mode
VLAN
IEEE802.1Q VLAN with GVRP
Up to 256 VLAN groups, 1 to 4094 IDs
Class of Service (CoS)
4 Priority Queues/ Port
IEEE 802.1p CoS tag and IPv4 TOS/DiffServ based prioritization
Rate Control
Ingress/Egress Filtering for Broadcast, Multicast, Unknown DA or all packets
Network Time Protocol (NTP) Yes
Port Security
Assign authorized MAC to specific port
IP Security
IP Security to prevent unauthorized access
802.1x
Port based Network Access Control
DHCP
DHCP Client/Server and DHCP Relay (Option 82)
Firmware Upgrade TFTP and NetVision
Alarm
Automated warning by pre-defined events
Event Alarm Relay
System event, Port Event, PoE Event
E-mail Warning
Up to 4 receipt e-mail accounts
System Log
Yes, Local or remote server with authentication

NETWORK REDUNDANCY

Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1D-2004 RSTP
Compatible with STP and IEEE802.1w
Redundant Ring
Ring and multi-ring support with < 5ms recovery time

ELECTRICAL SPECIFICATIONS

Device Power Input Voltage (Positive or Negative)
DC1/DC2
IEEE 802.3af 48VDC (46-57VDC)
IEEE 802.3at 53VDC (50-57VDC)
Device Power Consumption
Without PD Load (max.) 28W
IEEE 802.3af Mode (max.) 144W
IEEE 802.3at Mode (max.) 262W
Power Connector Type
(1) 6-Pin Screw Terminal Block
Power Input Redundancy Yes
Reverse Polarity Protection Yes
Power Alarm Relay
Alarm for power failure notification
Relay Rating 1A Max. @ 30VDC

ENVIRONMENTAL SPECIFICATIONS

Air Temperature
System On
802.3af (15.4W x 8 Ports) -40° to +70° C
802.3at (30W x 8 Ports) -40° to +60° C
System Off -40° to +85° C
Operating Humidity (Non-Condensing) 0% to 95%
MTBF (Mean Time Between Failures) 37.5 years

ETHERNET SPECIFICATIONS

Connector Type RJ45
Number of Ports
8 x 10/100BASE-TX with PoE Injector
2 x 10/100/1000BASE-TX
PoE Output Pin-out – RJ45 Pins 1, 2 – V -
Pins 3, 6 – V +
Link Distance 100 meters
Port Alarm Relay
Alarm Relay for Port Failure Notification
Relay Rating 1A Max. @ 30VDC

SERIAL CONSOLE PORT SPECIFICATION

Connector Type RJ45
Number of Ports 1
Serial Interface
RS-232 (TXD, RXD, Signal GND)
Baud Rate 9600bps
Device Data Control
Data Bits 8
Parity None
Stop Bits 1
Flow Control None

EXPORT INFORMATION

Packaged Shipping Weight 4.2 lbs
1.91 kg
Package Dimensions 11.3" x 5.5" x 9.1"
28.7 x 13.97 x 23.11 cm
UPC Code 7-56727-32035-7
ECCN 5A992
Schedule B Number 8517.62.0050

REGULATORY APPROVALS

Emissions
European Standard EN55022
AS/NZS CISPR 22
FCC Part 15 Subpart B
Class A limit
Immunity
European Standard EN55024
IEC 1000-4-2/EN61000-4-2: ESD
IEC 1000-4-3/EN61000-4-3: RF
IEC 1000-4-4/EN61000-4-4: Fast Transient/Burst
IEC 1000-4-5/EN61000-4-5: Surge
IEC 1000-4-6/EN61000-4-6: Conducted Disturbance
IEC 1000-4-8/EN61000-4-8: Magnetic Field
IEC 1000-4-11/EN61000-4-11: DIPS and Voltage Variations
Safety
IEC 60950/EN60950 (LISTED)
CSA C22.2 No. 60950/UL60950 Third Edition
Vibration
IEC 61373
Shock
IEC 61373
Other
European Standard: 2002/95/EC Directive (RoHS)
Regulatory Approvals

RECOMMENDED PRODUCTS ::

32103-3	PS1040, 40 Watts Industrial DIN Rail Power Supply (24V, 40W, DIN Rail)
1200059	SFP, Multi-Mode, 1000BASE-GSX (Extended Temperature)
1200060	SFP, Single-Mode, 1000BASE-GLX (Extended Temperature)
1200061	SFP, Single-Mode, 1000BASE-GLHX (Extended Temperature)
1200055	LC-ST Fiber Adapter Cable Multi-Mode
1200056	LC-ST Fiber Adapter Cable Single-Mode

COMTROL®

Warranty Information
Comtrol offers a 30-day satisfaction guarantee and 5-year limited warranty.

Sales Support
+1.763.957.6000
sales@comtrol.com

Technical Support
+1.763.957.6000
www.comtrol.com/support

Email, FTP, and Web Support
info@comtrol.com
ftp.comtrol.com
www.comtrol.com

© 2013 by Comtrol Corporation. All Rights Reserved. Printed in the U.S.A. All trademarks used herein are the property of their respective trademark holders. Specifications are subject to change without notice. LT1590B